

Title (en)

LITHIUM-AIR BATTERY

Title (de)

LITHIUM-LUFTBATTERIE

Title (fr)

ACCUMULATEUR LITHIUM-AIR

Publication

EP 2495803 A1 20120905 (EN)

Application

EP 10826572 A 20101020

Priority

- JP 2009248755 A 20091029
- JP 2010068430 W 20101020

Abstract (en)

A lithium air battery capable of being used for a long time with little deterioration due to influence by moisture in the air in which oxygen supply to a porous cathode is not inhibited by an air electrode current collector is provided. The lithium air battery includes an oxygen permselective film 80 that is less likely to transmit moisture vapor and that selectively transmits oxygen, an oxygen chamber 88 that stores oxygen, an air electrode current collector 62 made of a porous material, a diffusion layer 50 that is arranged between the air electrode current collector and a porous cathode and is made of a conductive material, the porous cathode 10 containing a conductive material and a catalyst material, a separator 30 that is less likely to pass moisture vapor, a nonaqueous electrolyte 40, an anode 20 that extracts lithium ions, and an anode current collector 64. The lithium air battery may have a water-repellent layer.

IPC 8 full level

H01M 12/08 (2006.01); **H01M 12/06** (2006.01)

CPC (source: EP KR US)

H01M 12/06 (2013.01 - EP US); **H01M 12/08** (2013.01 - EP KR US); **Y02E 60/10** (2013.01 - US)

Cited by

AT514871A1; AT514871B1; EP3073553A4; CN107408744A; EP3231034A4; US10693148B2; EP4290637A1; WO2016087195A1; WO2016100204A2; US10978703B2

Designated contracting state (EPC)

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DOCDB simple family (publication)

EP 2495803 A1 20120905; EP 2495803 A4 20140226; BR 112012009524 A2 20160517; CN 102598400 A 20120718; IN 3453DEN2012 A 20151023; JP 2011096492 A 20110512; KR 20120100939 A 20120912; US 2012237838 A1 20120920; WO 2011052440 A1 20110505

DOCDB simple family (application)

EP 10826572 A 20101020; BR 112012009524 A 20101020; CN 201080047551 A 20101020; IN 3453DEN2012 A 20120420; JP 2009248755 A 20091029; JP 2010068430 W 20101020; KR 20127010216 A 20101020; US 201013503727 A 20101020